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Measuring Maternal Nonstandard Work in Survey Data

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Abstract

Surveys differ in the measurement of nonstandard work, such that some surveys require respondents to indicate whether they work either a standard or a nonstandard schedule, whereas others allow respondents to indicate that they work both types of schedules. We test whether these measurement decisions influence the estimated prevalence of maternal nonstandard work, using data from two sources: the Current Population Survey (N = 1,430) and the Fragile Families and Child Wellbeing Study (N = 2,524). Using propensity score techniques, we find that giving respondents the option of reporting work at more than one type of schedule doubles the prevalence of nonstandard work, compared to allowing respondents to indicate only one type of schedule. Our results suggest that many mothers of young children regularly work at both standard and nonstandard times and that mutually exclusive conceptualizations of standard and nonstandard work schedules do not fully capture their experiences.

Keywords

Fragile Families and Child Wellbeing; maternal employment; nonstandard work

Recent decades have seen a remarkable increase in the labor force participation of women with children; in 2010, 71% of all mothers worked (Bureau of Labor Statistics, 2011). In addition, mothers increasingly hold jobs that involve nonstandard schedules; that is, work hours in the evening, at night, on weekends, or on an irregular or rotating shift (McMenamin, 2007). Data from the American Time Use Survey show that 11.7% of mothers who were working on the day of the time diary worked more than half of their hours outside the day-shift hours of 8 a.m. and 4 p.m., and 57.3% of such mothers spend at least some of their working hours outside of the 8 a.m.–4 p.m. range (Connelly & Kimmel, 2007).

The variability of nonstandard schedules presents some challenges for survey measurement. Nonstandard schedules often occur in sectors such as retail or service (McMenamin, 2007), which may require work during a variety of times. Indeed, in one of the data sets used here (the Fragile Families and Child Well-Being Study; FFCWS), 50% of mothers reported regularly working during both standard and nonstandard times at their current jobs (authors'

calculations). Yet, in many major surveys used in this research area, respondents are allowed to indicate only one shift that best describes their work schedule: standard or nonstandard. Other surveys allow respondents to indicate they work more than one schedule. Cross-survey inconsistencies in the measurement of nonstandard work make it challenging to compare findings across studies that relate maternal nonstandard work to family life outcomes. Additionally, accurate estimates of the prevalence of nonstandard work are difficult to determine when one survey allows for a more expansive definition of nonstandard work than another.

This paper examines how variation in the measurement of maternal nonstandard work influences estimates of the prevalence of nonstandard work. We do so using two datasets—the FFCWS and the Current Population Survey (CPS); the former allows women to indicate that they work more than one type of work schedule (i.e., both standard and nonstandard times), while the latter does not. These widely used data sets are ideally suited to examine nonstandard work among less-advantaged mothers, who are overrepresented in jobs requiring work at nonstandard times (McMenamin, 2007).

Previous Research

A large and growing literature examines factors influencing selection into nonstandard work (Connelly & Kimmel, 2007; McMenamin, 2007; Presser, 1999, 2003, 2004; Presser & Cox, 1997), and the linkages between nonstandard work and child well-being and family functioning (Han, 2005, 2006; Hsueh & Yoshikawa, 2007; Joshi & Bogen, 2007; Strazdins, Clements, Korda, Broom, & D'Souza, 2006). However, no previous study has examined differences in the measurement of nonstandard work across large public survey data sets.

Research in this area has relied on a wide range of data sets that differ in the measurement of maternal work schedules—specifically, the requirement that respondents choose whether they work a standard or nonstandard schedule versus allowing them to indicate that their jobs involve work on both types of schedules. If large numbers of employees work during both nonstandard and standard times, then surveys that do not allow respondents to indicate both types of work may underestimate the prevalence of nonstandard work. Additionally, if the types of people who work both standard and nonstandard times differ from those who work only one type of schedule, then surveys that do not allow respondents to choose more than one option will only capture the experiences of a subgroup of all nonstandard workers. Extrapolating findings from an unrepresentative subgroup could introduce bias of unknown magnitude or direction. On the other hand, if there is little or no overlap in the population that regularly works a standard schedule and the population that regularly works a nonstandard schedule, then forced-choice measurement of standard vs. nonstandard work will not influence estimates of the prevalence of nonstandard work.

The goal of this study is to examine whether differences in the measurement of nonstandard work result in differences in the estimated prevalence of nonstandard work. We focus exclusively on the work schedules of mothers rather than fathers because many children in the FFCWS do not live with their fathers; further, the study does not collect information about the work schedules of residential nonbiological fathers or partners. Additionally, mothers spend more time on child care and housework than do fathers, even in dual-career households (Bianchi, Milkie, Sayer, & Robinson, 2000), and although employed mothers perform fewer household and child-related tasks than do mothers who stay at home, this is not offset by increased time contributions at home from husbands (Cawley & Liu, 2012). As such, there is reason to believe that maternal work schedules are particularly relevant for family life.

Comparing across the FFCWS and the CPS provides an ideal look at the implications of different ways of measuring nonstandard work. The CPS is a large, national survey and is used in the seminal studies of nonstandard work (McMenamin, 2007; Presser, 1999, 2003, 2004; Presser & Cox, 1997). The FFCWS, on the other hand, contains a large sample of disadvantaged mothers who are likely to be overrepresented on nonstandard work schedules and is one of the few national studies to allow women to indicate that they work more than one type of schedule. Although two other large data sets also allow respondents to indicate more than one type of schedule, the FFCWS is the most appropriate choice for the analyses in the current study. The NICHD Study of Early Child Care and Youth Development allows respondents to select more than one schedule, but the study is somewhat dated when looking at mothers of younger children, contains a sample of more advantaged mothers, and does not measure weekend work. The Welfare, Children, and Families Three City Study also allows some overlap across schedules, but does not distinguish between night and weekend work.

Although the FFCWS and CPS are the best choices for the comparison of nonstandard work measurement for this study, these data sets differ in other ways beyond the measurement of nonstandard work. The CPS contains a representative sample of the U.S. adult population, whereas the FFCWS is a sample of new mothers living in urban areas, with an oversample of unmarried parents. The prevalence of nonstandard work may differ across these two data sets, not because of how the question is measured, but rather due to differences in sample composition across the two studies. It is thus critically important to adjust for cross-survey differences in sample composition. Below we present a propensity-score matching technique that addresses this issue.

Method

FFCWS

The FFCWS is a longitudinal birth cohort study of 4,898 children born between 1998 and 2000 in 20 large U.S. cities (see Reichman, Teitler, Garfinkel, & McLanahan, 2001, for a detailed description of the sample design). The data include an oversample of nonmarital births, which resulted in a large ethnic minority and low-income sample.

For this analysis we limited the FFCWS sample to currently employed mothers who completed the age 5 core survey, conducted between July 2003 and February 2006. We focused on the age 5 interview because at age 5, most children are in child care or kindergarten, and mothers are more likely to have returned to work. Of the 4,898 respondents initially interviewed at the baseline wave, 4,139 completed the age 5 interview (85% of the original sample). We further limited the sample to the 2,614 respondents who had worked for pay in the previous week. Finally, we removed 40 respondents who were missing data on variables included in our models. The final analytic sample for the FFCWS study is 2,524 respondents.

CPS

The CPS is a nationally representative survey, sponsored jointly by the Bureau of Labor Statistics and the U.S. Census Bureau. We used data from the May 2004 CPS because it includes supplemental information about work schedules and falls within the 2003–2006 data-collection period of the age 5 FFCWS.

We selected our CPS sample to maintain comparability to the FFCWS. Starting with the 60,923 individuals who completed the CPS May 2004 work supplement, administered to employed individuals aged 15 or older, we limited the sample to mothers with young children aged 3–5 residing in metropolitan areas with populations of 250,000 or more (exact child age is not available in the CPS). As a result, we removed 31,803 men (52%), 26,473

women who did not have children aged 3–5 (43%), and 1,036 women who do not reside in large metropolitan areas (2%). We also removed 181 individuals who were missing data on variables included in our models. The final analytic sample is comprised of 1,430 employed mothers of young children residing in large metropolitan areas.

Results

Dependent Variable

FFCWS respondents were asked to indicate the schedule they *regularly* worked at their primary job using the following categories: (a) evenings (6 p.m.–11 p.m.), (b) nights (11 p.m.–7 a.m.), (c) weekends, (d) different times each week, and (e) weekdays. Given this list of distinct choices, we assume this last category literally refers to "daytimes during the week," or work on a standard schedule. FFCWS respondents were able to select more than one option. Thus, respondents were able to indicate that they worked both in the daytime during the week (i.e., a standard work schedule) as well as some kind of nonstandard schedule. Although 95% of the women in the FFCWS sample reported working "weekdays" at their primary job, about half of these women (52%) also reported working some nonstandard hours at this job (authors' calculations).

We coded the work schedule information collected in the FFCWS to indicate whether the respondent worked any nonstandard schedule. This variable was given a value of 1 if respondents work any of the nonstandard schedules ((a) through (d) above) and 0 if they do not, regardless of whether the woman reported also regularly working during a standard time (weekdays). Therefore, the measure of "nonstandard work" in the FFCWS includes women who worked any kind of nonstandard schedule, including evenings, nights and weekends, even if they also chose the response option "weekdays," which, as we argue, implies daytime work on the weekdays, or a standard work schedule.

To measure work schedules in the CPS, respondents are first asked, "On your main job, do you USUALLY work a daytime schedule or some other schedule?" Respondents select: (a) a regular daytime schedule (defined if necessary as any time between 6 a.m. to 6 p.m.) or (b) some other schedule. Only those respondents who select "some other schedule" are then asked, "Which of the following best describes the hours you USUALLY work at your main job?" The available options are: (a) an evening shift—any time between 2 p.m. to midnight, (b) a night shift—any time between 9 p.m. to 8 a.m., (c) a rotating shift—one that changes periodically from days to evenings or night, (d) a split shift—one consisting of two distinct periods each day, (e) an irregular schedule, and (f) some other shift. Weekend work is captured with a separate question that asks, "Which days of the week do you USUALLY work?" Respondents could select from any day of the week or "it varies." A dummy variable for nonstandard work was coded 1 if a respondent worked evenings, nights, different times, or weekends.

What is noteworthy, and distinguishes the CPS from the FFCWS, is that only women who reported that they do not usually work a daytime, or standard, schedule were then asked about nonstandard work hours. As noted above, many women in the FFCWS reported working at both standard and nonstandard times. Unlike the FFCWS, this eliminates the possibility that a woman could report working both a "weekday" schedule and a schedule involving work on evenings, nights, or during irregular times. But because weekend work is captured separately, women in the CPS could be coded as working both a daytime schedule and during weekends.

Control Variables

In both studies, mother's age is measured in years, and mother's race is measured with dummy variables that indicate whether she is non-Hispanic White, non-Hispanic Black, Hispanic, or some other race. Education is measured with dummy variables that indicate whether a respondent has less than a high school degree, a high school diploma or GED, some college or technical school, or a college degree or more education. A dummy variable indicates whether the mother is currently married. The number of children in the household is a continuous count of children under age 18. Household poverty is a dummy variable indicating whether a respondent's household income is below the official poverty threshold established by the U.S. Census Bureau. Although these measures are largely comparable across studies, household income is measured as a continuous variable in the FFCWS and a categorical variable in the May CPS. As a result, the poverty variable we use in this study is likely more precisely measured for FFCWS respondents. Finally, we include a continuous measure of hours worked in the past week.

Analytical Plan

A simple comparison of nonstandard work estimates from the FFCWS and CPS studies could be misleading due to selection bias, despite our efforts to select comparable samples. The primary concern is that respondents are selected to participate in these studies on the basis of specific demographic or behavioral characteristics; these characteristics might also be associated with nonstandard work. Because the FFCWS is designed to be representative of children born in U.S. cities with populations over 200,000 (Reichman et al., 2001), and oversamples racial minorities and women who had nonmarital births, the sample is more disadvantaged than the CPS in many ways (as shown below). Given that nonstandard work is disproportionately concentrated among workers with low education or low income, it is possible that these sample selection factors, rather than the way in which nonstandard work was assessed, could contribute to higher estimates of nonstandard work among FFCWS respondents.

To isolate the effect of nonstandard work measurement from the effect of sample composition, we employ both multivariate regression and propensity score–matching techniques. We create a composite data set including respondents from both FFCWS and the CPS, with an indicator variable for members of the FFCWS sample (coded as 1, hereafter referred to as the treatment group) or the CPS sample (coded as 0, hereafter referred to as the control group). Dehejia and Wahba (1999) and Lundquist and Smith (2005) use a similar approach to strategically sample respondents from different studies or samples. Because we have limited our analysis to quite select samples, particularly from the CPS, we do not use weights in our analyses.

First, we estimate multivariate logistic regression models to predict the relative odds of nonstandard work, adjusting for characteristics such as mother's age, race, education, marital status, the number of children under age 18 in the household, household poverty, and weekly work hours (see Equation 1).

$$\text{logit}\left[\mathrm{P}(\mathrm{y}=1)\right]=\alpha+\beta_1 \mathrm{D}_1+\gamma\mathbf{X}+\mathrm{e} \quad (1)$$

Here, logit [P (y=1)] represents the log odds of working a nonstandard schedule. The key independent variable D_1 is the indicator for membership in the treatment (FFCWS) or control (CPS) sample, and **X** is a vector of control variables. The coefficients are exponentiated and reported in terms of odds ratios. We also report the marginal effects (dy/dx).

Although multivariate regression is likely an improvement over a simple unconditional comparison of the prevalence of nonstandard work across studies, such models contain limitations that might bias our estimates (Dehejia & Wahba, 1999; Morgan & Winship, 2007; Rosenbaum & Rubin, 1983, 1984). Specifically, while multiple regression controls for differences across samples in observed characteristics, a propensity score–matching process allows us to match treatment respondents with control respondents who have similar characteristics. This approach isolates the influence of the treatment (how nonstandard work is measured) on the estimated prevalence of nonstandard work. The propensity score approach is nonparametric and does not require assumptions about a linear relationship between the dependent and independent variables. It also allows us to restrict inference to the range of common support (i.e., the area of the propensity score distribution for which there are both treatment and control cases), and discard treatment cases that do not have an appropriate comparison. Although propensity score matching overcomes some limitations of regression, both methods rely on selection on observables as an identification strategy. Thus, our estimates are still susceptible to bias due to unobservable characteristics that may differentiate those in the FFCWS from those in the CPS.

Our propensity score models estimate the average treatment effect on the treated (ATT). In other words, the ATT is the expected "what if" difference in the estimate of nonstandard work if a randomly selected FFCWS respondent was asked to report her work schedule using the FFCWS question wording versus the wording of the CPS.

The first step of propensity score matching is estimation of the propensity score, which is the conditional probability of treatment selection (i.e., whether a person is in the FFCWS or the CPS sample) (Rosenbaum & Rubin, 1983). We specify a logistic regression model that predicts the probability of being in the FFCWS, adjusting for controls. In Equation 2, D is the variable that indicates membership in the FFCWS sample (1 = FFCWS, 0 = CPS), and **X** is a vector of control variables (described above) that determine selection into the FFCWS sample.

$$\text{logit}\,[\mathrm{P}(\mathrm{D}=1)] = \alpha + \mathbf{X}\beta + \mathrm{e} \quad (2)$$

The propensity score is the resulting conditional predicted probability from this model. We then match FFCWS respondents to CPS respondents with similar propensity scores, that is, similar likelihoods of being in the FFCWS.

Estimation of the ATT is shown in Equation 3 (Heckman, Ichimura, & Todd, 1997; Morgan & Harding, 2006), where n^1 is the number of treatment cases, i is the index over treatment cases, j is the index over control cases, and $\omega_{i,j}$ represents a set of scaled weights that measure the distance between each control case and the target treatment case (Morgan & Winship, 2007, pp. 105–106).

$$\delta_{TT,match} = \frac{1}{n^1}\Sigma_1 \left[(y_i|d_i=1) - \Sigma_j \omega_{i,j} \left(y_i|d_j=0 \right) \right] \quad (3)$$

We use nearest-neighbor matching to estimate the ATT, which constructs the counterfactual for each treatment case using the control case with the closest propensity score. In this case, the weight is simply 1 for the control case with the closest propensity score and 0 for all other cases. Our final specification ensures quality matches by limiting the sample to the range of common support and limiting the distance of the matched control case such that it is within .25 of a standard deviation of the estimated propensity score. In analyses not shown, several other matching algorithms and specifications were used and results did not differ across these specifications. We ensured that the propensity score balances the data, simulating a quasi-experimental design. Balance is achieved when matched treatment and

control cases are similar (and statistically indistinguishable) on all covariates included in the propensity score estimates. This can be evaluated with *t*-tests for each covariate between treatment and control cases with similar propensity scores. Results of these tests (not shown) demonstrate that there are no statistically significant differences between the FFCWS and CPS in the matched sample.

Results

Table 1 provides detail on the measurement and prevalence of nonstandard work across the two studies. This table highlights the inconsistency of work schedule measurement across the two studies. As noted above, almost all employed mothers (95%) in the FFCWS reported working a "weekday" schedule, which implies daytime work hours during the work week. The most common nonstandard schedule was weekend work (39%), followed by evening work (25%) and different times each week (26%). Many respondents took advantage of the opportunity to select more than one schedule in the FFCWS survey; 50% reported working a weekday schedule in addition to some type of nonstandard schedule, 46% worked a weekday schedule exclusively, and only 5% worked nonstandard schedules exclusively (either a single nonstandard schedule or some combination of nonstandard schedules, such as nights and evenings).

The estimated prevalence of nonstandard work was much lower in the CPS. The vast majority of CPS respondents usually worked a daytime schedule (83%) and the remaining 17% worked some other nonstandard schedule. Of critical importance, only this 17% of the sample who reported not usually working a daytime schedule were asked additional questions about work during evenings, nights, split shifts, or irregular times, leading to a much lower prevalence of these types of nonstandard work. Less than one in 10 respondents worked an evening shift (8%), 4% worked an irregular schedule, and 2% worked a night shift. Unlike the FFCWS, the CPS did not capture the extent to which respondents worked both standard and nonstandard weekday schedules.

As noted, the CPS asked separate questions about the time of day and the days of the week *usually* worked, which means that weekend work could have been selected in addition to a standard or nonstandard weekday shift. Nonetheless, weekend work was less common in the CPS, with only 15% of mothers reporting that they usually worked on a Saturday or Sunday, compared to 39% in the FFCWS. This may be due to sample composition differences between the two surveys, or to the fact that, in the CPS, weekend work was only asked after a series of questions regarding weekday work; in the FFCWS weekend work was asked as part of the main battery of questions regarding nonstandard work.

Table 2 shows descriptive statistics for the FFCWS and CPS (unmatched) samples. On average, 54% of the FFCWS sample reported working a nonstandard shift, compared to 27% of the CPS sample. Additionally, this table reveals substantial differences in sample characteristics despite our efforts to create comparable analytic samples. The FFCWS sample includes more racial minorities and mothers with less education, and mothers in the FFCWS were less likely to be married and much more likely to be in poverty compared to the CPS.

Table 3 presents the results of logistic regressions predicting nonstandard work, using the pooled FFCWS and CPS data and using the indicator of whether a woman is in the FFCWS survey to predict whether a woman works a nonstandard schedule, controlling for other covariates. The odds ratio indicates that the odds of reporting nonstandard work were 2.8 times higher for respondents in the FFCWS as compared to respondents in the CPS. The marginal effects suggest that for the average respondent, controlling for observable differences in sample composition, the predicted probability of nonstandard work was 24

percentage points higher in the FFCWS study than in the CPS. This estimate is very close to the unconditional difference of 28 percentage points, which shows that controlling for sample characteristics explains very little of the difference in the prevalence of nonstandard work between the FFCWS and the CPS.

Table 4 presents estimates of the propensity score analysis. The first two columns of Table 4 summarize the unadjusted and adjusted mean difference in the prevalence of nonstandard work between the FFCWS and the CPS samples from Tables 2 and 3. The next column reports the ATT estimate from the propensity score analysis. This provides further evidence that the FFCWS question format is associated with a higher likelihood of reporting nonstandard work compared to the CPS. The ATT estimate suggests that if a randomly selected FFCWS mother were asked to report her work schedule using both the FFCWS question wording and the CPS question, the prevalence of nonstandard work would be 22 percentage points higher with the FFCWS question. These results are very similar to the adjusted mean difference derived from the logistic regression (.24) and the unadjusted mean difference (.28).

In order to test the robustness of our results, several supplementary analyses were performed. To further attempt to create comparable samples between the CPS and FFCWS, we limited our CPS sample to those living in the same 20 cities as the FFCWS (n = 368). Results from a propensity score analysis using this sample did not differ from our main results. We also performed supplementary analyses including mothers' occupation in the matching process. To do this, we were required to use 2001 CPS data, rather than that from 2004, due to changes in the measurement of occupation in the CPS. Results from analyses including occupation in the matching process did not substantively change from our main findings. Finally, while our main analysis is unweighted, analyses performed using weights were unchanged.

Discussion

Taken together, the results of the current study suggest that the manner in which a survey measures nonstandard work has a substantial impact on the estimated prevalence of nonstandard work. The FFCWS and the CPS used different methods of eliciting information on nonstandard work, which at first glance seem only slightly different, but yielded large differences in the prevalence of nonstandard work among mothers of young children. Specifically, the FFCWS allowed mothers to indicate that they regularly work at both standard and nonstandard weekday times on their primary job, whereas the CPS required that mothers choose only one option to represent their "usual" weekday hours on their primary job. These two approaches resulted in an estimated prevalence of nonstandard work in the FFCWS that is approximately twice as high as that in the CPS. The CPS captured some degree of overlap in schedules by collecting information about days of the week worked separately from the time of day usually worked. Nevertheless, estimates of nonstandard work remained much higher in the FFCWS, indicating that it is the complexity and multiplicity of types of schedules that is important, not just the combination of weekday and weekend work.

Indeed, we found that the estimated difference in prevalence of nonstandard work between the FFCWS and the CPS is almost identical when comparing raw means, when using a multivariate regression, or when using the propensity score technique. This implies that the format of the work schedule question has important implications for estimates of nonstandard work, rather than the characteristics of women in the two samples.

A key finding was that a distinction between standard versus nonstandard weekday work is not relevant to the lives of many working mothers. Many mothers who worked a nonstandard weekday schedule also regularly worked during standard times, and conversely, many mothers who worked a majority of their hours on a standard schedule worked during nonstandard times as well. Indeed, very few mothers (about 5%) exclusively worked a nonstandard schedule (Table 1). This finding is important for family researchers and suggests that dichotomizing workers into those who work standard vs. nonstandard jobs does not accurately reflect women's actual experiences.

While the FFCWS allowed women to indicate that they worked more than one type of schedule, what is as yet unknown from either the CPS or the FFCWS is the share of total work hours that occurred on a nonstandard schedule. Future surveys could benefit from allowing women to document the distribution of their total work hours across various schedules to better capture the intensity of maternal work at different times.

A limitation of our analysis is that regression-based methods such as logistic models and matching methods can only control for differences in observable characteristics between the samples, and this limits the inferences we can draw from our analyses. If unobserved differences between the samples also lead to a greater likelihood of nonstandard work among the FFCWS sample, our estimates will overestimate the importance of the different manner of measuring nonstandard work. Another reasonable concern is that allowing respondents to select more than one work schedule option increases measurement error, which may result in an overestimate of nonstandard work. Future data collection efforts should attend to this possibility. More qualitative work is also needed in order to shed light on the complexities of work schedules in families with young children.

Over the last two decades, a significant restructuring of the U.S. labor market and movement towards a 24/7 economy have transformed the work lives of many Americans. Accordingly, scientific interest in the timing and regularity of work and their impact on individuals and families has grown substantially. In our view, much of the research in this area has paid insufficient attention to measurement issues and their implications for the prediction of family well-being or child development. While many large-scale surveys ask respondents to select the one schedule that best describes their work hours, others allow respondents to report as many as apply. Our estimates based on two widely used data sets in the field provide some insight into implications of such differences in measurement. Importantly, none of the different ways of measuring nonstandard work is necessarily right or wrong; whether one measure versus another is the most suitable depends on the relevant theory for a given research question. Nevertheless, we argue that in many studies investigating the impact of work schedules on health and well-being, the key variable of interest is any regular exposure to nonstandard work hours, irrespective of whether it is the worker's predominant or only schedule.

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Table 1

*Work Schedule Descriptive Statistics for FFCWS (*n = *2,524) and CPS (*n = *1,430)*

FFCWS Year 5	%	CPS May 2004	%
Schedule regularly worked (can choose more than one)		Schedule usually worked (can choose daytime or some other schedule)	
Weekdays	95	Usually work daytime	83
Evenings (6 p.m.–11 p.m.)	25	Some other schedule	17
Nights (11 p.m.–7 a.m.)	12	If works some other schedule, describe hours usually worked	
Weekends	39	Evening shift (2 p.m.–midnight)	8
Different times each week	26	Night shift (9 p.m.–8 a.m.)	2
		Rotating shift (changes from day to evening/night)	1
Work schedule combinations		Split shift (two distinct periods in a day)	0
Worked weekdays plus some type of nonstandard	50	Irregular schedule	4
Worked nonstandard but no weekdays	5	Some other shift	0
Worked weekdays but no nonstandard	46	Days of the week usually worked (asked separately from work shift)	
		Works on Saturday, Sunday, or “it varies”	15

Note. All results are unweighted.

Table 2

*Sample Characteristics for FFCWS (*n = *2,524) and CPS (*n = *1,430)*

	FFCWS Year 5		CPS May 2004		
	M	***SD***	***M***	***SD***	**Difference**
Works nonstandard schedule	0.54		0.27		0.28***
Mother's age	30.42	5.98	33.13	6.40	−2.71***
Mother is White (ref.)	0.21		0.61		−0.4***
Mother is Black	0.50		0.13		0.38***
Mother is Hispanic	0.25		0.19		0.06***
Mother is "other" race	0.03		0.07		−0.04***
Mother has less than high school education	0.19		0.10		0.09***
Mother has high school diploma/GED (ref.)	0.27		0.24		0.03
Mother has some college/technical school	0.38		0.31		0.07***
Mother has college degree or more	0.16		0.35		−0.19***
Mother is married	0.35		0.75		−0.4***
Number of children < 18 in household	2.38	1.27	2.15	0.95	0.23***
Household under poverty line	0.28		0.13		0.15***
Hours worked per week	37.11	11.10	33.90	11.85	3.22***

Note. All results are unweighted.

ref. = reference group in models

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 3

Logistic Regression Predicting Nonstandard Work Among Employed Mothers (n = *3,954)*

	OR	*SE*	dy/dx	*SE*
Fragile Families sample	2.788***	0.234	0.241***	0.018
Mother's age	0.843***	0.04	−0.042***	0.012
Mother's age (squared)	1.002***	0.001	0.001***	0
Mother is Black	0.996	0.095	−0.001	
Mother is Hispanic	0.783*	0.08	−0.060**	0.024
Mother is "other" race	1.222	0.209	0.05	0.043
Mother has less than high school education	1.205†	0.134	0.046*	0.028
Mother has some college/technical school	0.823*	0.072	−0.047**	0.021
Mother has college degree or more	0.479***	0.054	−0.173***	0.025
Mother is married	0.893	0.074	−0.028	0.02
Number of children < 18 in household	1.122***	0.035	0.028***	0.008
Household under poverty line	1.283**	0.118	0.062***	0.023
Hours worked per week	0.986***	0.003	−0.003***	0.001
Constant	12.105**	9.477		
Pseudo R^2	0.0916			

Note. All analyses are unweighted.

† $p < .10$.

* $p <. 05$.

** $p < .01$.

*** $p < .001$.

Table 4

Comparison of Mean Difference, Adjusted Mean Difference, and Average Treatment Effect on the Treated in Prevalence of Nonstandard Work between FFCWS Year 5 and CPS May 2004

	Unmatched		*Matched*
	Mean difference	**Adjusted mean difference**	**ATT**
Difference between FFCWS Year 5 and CPS May 2004 prevalence of nonstandard work	0.28 (.02)	0.24 (0.02)	0.22 (0.03)
CPS *n*	1,430	1,430	1,426
FFCWS *n*	2,524	2,524	2,504
N	3,954	3,954	3,930

Note. ATT standard errors are bootstrapped; analyses are unweighted.